

Running head: RECRUIT FIREFIGHTER TRAINING

Executive Development

Recruit Firefighter Training:

Meeting the Demand in Massachusetts

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Certification Statement

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

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### Abstract

The Massachusetts Firefighting Academy (MFA) has delivered recruit training for career firefighters since 1966. The problem was that the MFA was unable to meet the fire service demand for its 12-week recruit firefighter-training program. The purpose of the research was to evaluate the program to determine how it could more effectively meet the fire service customer demand. Action research was conducted to achieve a viable solution to the problem. Research questions sought to determine customer expectations while exploring how the MFA and other academies meet training demand. Additional questions asked what current and future training resources would be available to MFA. Training management literature and other fire academy curriculums were reviewed to develop a more efficient delivery plan.

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## Recruit Firefighter Training – Meeting the Demand in Massachusetts

### Introduction

The Massachusetts Firefighting Academy (MFA) is a division of the Massachusetts Department of Fire Services (DFS). Since 1966, the MFA has provided appropriate fire service training to personnel of the cities, towns, and fire districts of the Commonwealth at no cost. A variety of training is offered to full-time, call, and volunteer members of the fire service as well as a number of public and private sector organizations throughout the state. With the exception of several large city departments, all entry-level career firefighters attend the 12-week recruit firefighter-training program conducted at the MFA. Upon successful completion of the recruit program, all students have met the requirements of the National Fire Protection Association (NFPA) *Standard for Fire Fighter Professional Qualifications* (1001) and are certified to the level of Firefighter I /II by the Massachusetts Fire Training Council. Additionally, certifications awarded by the MFA are nationally recognized through affiliation with the ProBoard, a national fire service certification agency.

Demand for the recruit-training program has increased steadily over the past decade. These increases have necessitated several program redevelopments in order to accommodate both extended timetables as well as larger class sizes. This extreme growth has left the MFA searching not for a new curriculum, but rather for new and more efficient methods of curriculum delivery.

The research problem is that the MFA is now unable to meet the ever-growing demand for its recruit-training program. The problem directly impacts communities by significantly delaying the deployment of trained firefighters to fire departments

throughout the Commonwealth. The purpose of this research is to evaluate the recruit training program to determine how it can more effectively meet the Massachusetts fire service demand.

Action research was used to study the present situation in order to develop a more capable and efficient delivery system. Research questions include the following:

What are the demands of the MFA fire service customer?

How are other fire academies meeting their customer service requirements?

What is the MFA doing to meet current training demands?

What training resources are currently available to meet the identified demands?

What training resources would be needed to meet the demand?

### Background and Significance

The MFA traces its roots back to the mid 1960s when a group of local fire chiefs formed what was then known as the Central Massachusetts Fire Academy. Fire service training was conducted at several fire department facilities as well as on the grounds of the former Cushing Hospital in Framingham throughout the late 1960s.

In 1971, through passage of Massachusetts General Laws (MGL) Chapter 842 of the Acts and Resolves (see Appendix A), the MFA was first established. The intention of the law was to provide training to municipal fire service personnel at no cost to all participating cities and towns. The law also designates the creation and structure of the Massachusetts Fire Training Council (MFTC). The Executive Office of Public Safety & Security (EOPS) website describes the role of the MFTC as follows:

The MFTC is the sole certifying agency for all levels of fire service personnel in the Commonwealth. The council has statutory authority to promulgate rules and

regulations for the operation of the MFA and has the authority to approve courses and curriculum taught by the Academy. (EOPS, 2007)

During this time the academy continued to operate at the Cushing Hospital site while being overseen by the Massachusetts Department of Education. In the same year, training was relocated to the site of a former Civilian Conservation Corps camp located on the grounds of the present facility in Stow, Massachusetts. Legislation was passed in 1973 that provided additional funding for fire service training through a small surcharge placed upon liability insurance (see Appendix B).

Training continued at the Stow site until the main building was destroyed in an arson fire in 1982. Training was shifted back to the Cushing Hospital site for practical evolutions while classroom functions were accomplished through the use of the former Horse Pond Road School located in nearby Sudbury. The building is now the site of the Massachusetts State Police Crime Laboratory.

In the year following the fire, legislators approved a multi-phased initiative that would provide for the construction of a new, state-of-the-art training facility in Stow. The present main academy building was completed in 1989 that was followed by the dedication of the fireground training buildings in 1991.

Through a massive reorganization in the mid 1990s, the newly established Department of Fire Services absorbed the Massachusetts Firefighting Academy. This merger of services brought together several divisions under the same roof at the new Stow facility. In addition to the MFA, these divisions include the Office of State Fire Marshal, Hazardous Materials, Arson Investigation, Administration, and State Police Bomb Squad.

As of September 2007, the MFA has graduated 177 recruit classes of varying sizes and timeframes. In an effort to meet growing demand over the past decade, the MFA has delivered the program through several different curriculums and class size increases. The most recent change took place in 2004 with the current delivery system training 72 students per 12-week class. In spite of these changes, the wait time for entrance into the program has risen to an unprecedented average of nine months. As a survey conducted in the course of this research indicated, increases in new firefighter hiring is expected to occur over the next several years (see Appendix C). It was therefore imperative that this research be conducted. Researching the needs of the program, and identifying potential training resources can develop a more efficient and productive means of system delivery that is capable of meeting current and future demands. Research of the problem is also necessary in order to respond appropriately in a timely manner.

### Literature Review

The literature review was conducted first to identify significant proven methods for managing action research leading to a positive outcome. According to Isaac and Michael (1995), the purpose of conducting action research is “to develop new skills or new approaches to solve problems with direct application to the classroom or other applied setting” (p. 46). Isaac and Michael (1995) further describe six basic steps for conducting action research:

1. Define the problem or set the goal. What is it that needs improvement or that might be developed as a new skill or solution?
2. Review the literature to learn whether others have met similar problems or

achieved related objectives.

3. Formulate testable hypotheses or strategies of approach, stating them in clear, specific, pragmatic language.
4. Arrange the research setting and spell out the procedures and conditions.  
  
What are the particular things you will do in an attempt to meet your objectives?
5. Establish evaluation criteria, measurement techniques, and other means of acquiring useful feedback.
6. Analyze the data and evaluate the outcomes. (p. 59)

With the above guidelines in mind, the literature review focused on the research questions presented. The first question asked what the fire service customer demands of the MFA. An MFA customer can be identified as any of the approximately 365 fire departments statewide. It can be surmised through a review of U.S Census statistics that most Massachusetts communities with a population of less than 150,000 uses MFA recruit training. In the case of this particular research problem, the fire chiefs of the 130 departments who utilize recruit training are the customers. As Carter and Rausch (1989) state:

Many fire department chiefs consider training to be one of the most important functions in fire department operations because it is so central to operational competence. One reason for this is that rather than basing the selection of firefighters on experience alone, other factors are also considered, such as physical condition, mechanical ability, personality, educational background, and ability to learn. Many people enter the fire service every year, most with no

previous experience as firefighters. Training, therefore, is essential for effective performance, and it is only with a comprehensive training program that a fire department is able to establish and maintain a competent and well-trained force. (p. 339)

It is understood that the expectations of the MFA recruit-training customer are high. Forsman (2002) states, “in essentially all fire departments, basic training for incoming personnel is a major concern and commitment” (p. 273). The customer can anticipate that upon graduation from the program, the new firefighter possesses all the basic requisite skills and abilities necessary to function at an incident. Ridenhour (2002) found that “four traits and abilities make up the ideal recruit: attitude, academics, drill ground skills, and physical fitness” (p. 110). The MFA has and continues to strive to produce new firefighters whose abilities exceed national standards.

The second research question asked how other fire academies are meeting the requirements of their fire service customers. As Massachusetts is unique in providing basic fire training at no cost to the customer, very little data exists in written form for the sake of research. However, much valuable information is readily available regarding training system delivery and curriculums utilized by other fire academies. Many of these academies provide similar training in various timeframes but also charge communities a tuition fee. Smeby (2006) found that “many firefighters are not given the needed training at the basic skills level. An NFPA study indicates that an estimated 233,000 firefighters lack formal training” (p. 112). Nearby states such as Connecticut provide recruit level fire training with tuition charged to the communities. Although the Connecticut Fire Academy has recently extended its training program from 52 to 70 days and increased

class sizes to 54 students, it remains able to meet the current demand (B. Deford, personal communication, October 12, 2007).

A third research question asked what the MFA is doing to meet the current demand. In 2004, members of the recruit training staff visited the New York City Fire Department (FDNY) Training Academy. The FDNY routinely conducted recruit-training classes in excess of 200 students in the years following the September 11<sup>th</sup>, 2001 attacks. It is important to note that this was accomplished in a facility that is only slightly larger than that of the MFA. Utilizing the knowledge gained from the FDNY, staff members developed a delivery system capable of training 72 students per class (a 64% increase from previous classes of 44 students). Although somewhat successful, the program severely overtaxes the facility. When initiated in late 2004, the new plan was expected to eventually overcome the increased demand. Unfortunately, the wait time for entrance into the program has grown to an all time high of 9 months. The wait list, which normally averages about 200, presently numbers approximately 260. (C. Juda, personal communication, October 5, 2007). Identification of potential new resources and efficient delivery methods necessitate this research.

The fourth research question asked what training resources are currently available to meet the identified demand. Forsman (2002) found that “a fire and rescue service training center can consist, at one extreme, of a mowed field with some utility poles on which to practice ladder evolutions or, at the other extreme, of a multimillion-dollar metropolitan academy” (p. 278). A survey (see Appendix C) was conducted earlier this year to determine potential training resources throughout the state. The data collected from the survey will be examined in the results portion of this paper. The MFA’s current

inventory of training resources includes classrooms, burn building, training tower, as well as an extensive list of other facility features (see Appendix D). An expansion of the facility is currently in the works with an expected 2011 date of completion.

A fifth and final question asked what training resources would be needed to meet the demand. Throughout this research, consideration has been given to the possibility of conducting several training classes simultaneously. Research to this point has shown that alternative training sites that would meet the needs of the MFA exist throughout the state. Significant methodology is available through research of other training academies. Of particular interest is the U.S. Department of Defense (DOD) Fire Academy described by Forsman (2002) as “the fire academy of all academies” (p. 283). The module or “block” (DOD, 2001) curriculum utilized by the DOD together with appropriate alternative resources may be found capable of meeting the demand. The Long Beach (CA) Fire Department training academy utilizes this same type of module delivery (Long Beach Fire Department [LBFD], 2007). Although there exists abundance of course delivery data, Kiesewetter (2003) points out that “the uniqueness of each local academy and its organization’s job competencies may vary from slight to significant” (p. 7).

The scarcity of available research literature lends itself to the uniqueness of the research problem. Heifetz and Linsky (2002) have stated that:

Every day, people have problems for which they do, in fact, have the necessary know-how and procedures. We call these technical problems. But there is a whole host of problems that are not amenable to authoritative expertise or standard operating procedures. They cannot be answered by someone who provides answers from on high. We call these adaptive challenges because they require

experiments, new discoveries, and adjustments from numerous places in the organization or community. (p. 13).

This statement truly defines this research problem as an adaptive challenge. A clear definition of the goals and objectives of the recruit program need to be established. The literature review continues by identifying training standards and values necessary for the quality delivery of recruit level firefighter training. Carter and Rausch (1989) have stated, “at present, there is no single national, mandatory formula for training fire fighters to which local fire departments are compelled to conform” (p. 364). In spite of this absence, a leading source for firefighter training guidelines is the NFPA. Varone (2007) cites:

One of the primary missions of the National Fire Protection Association (NFPA) is to develop standards to help government and industry protect people and property from fire. NFPA standards include recommended fire codes, building codes, electrical codes, sprinkler requirements, and storage practices for industry. The NFPA also has a variety of fire service related standards, including standards for fire apparatus, protective clothing, equipment, hose, ladders, medical requirements, and training and safety programs for firefighters. (p. 98)

Varone (2007) also makes the clarification that “the NFPA is not a governmental agency, and NFPA standards are not law, unless a particular jurisdiction has adopted them.” (p. 98).

The appropriate measure of requisite firefighter knowledge and skill abilities is most clearly defined in NFPA 1001, *Standard for Fire Fighter Professional Qualifications*. NFPA (2007) describes the standard as “the minimum job performance

requirements (JPRs) for career and volunteer fire fighters whose duties are primarily structural in nature” (p. 6). NFPA (2007) clearly defines the standard’s purpose is “...to ensure that persons meeting the requirements of this standard who are engaged in firefighting are qualified. It shall not be the intent of the standard to restrict any jurisdiction from exceeding these requirements” (p. 6).

In the past, the MFA has traivaled to provide a comprehensive training experience in its recruit program. In addition to the abilities defined in NFPA 1001, the MFA recruit program makes a priority of instilling the discipline, morale and teamwork ethic so vital to the fire service. As Brauer (2003) states, “...identify [sic] the skills and attitude a new firefighter needs, and then arrange [sic] the objectives required for certification within this framework” (p. 83). The safe and efficient mitigation of emergency incidents relies heavily upon public safety teamwork. Katzenbach and Smith (1993) found that “teams outperform individuals acting alone or in larger organizational groupings, especially when performance requires multiple skills, judgments, and experiences” (p. 9). They further define a team as “a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable” (p. 45). A key element of fire service teamwork is the ability to perform these functions in an often dangerous and stressful environment. Montana and Mitchell (2005) find that “those who handle pressure best actually thrive on it when they perform” (p.109).

As Buckman (2005) states, “the fire service curriculum is significantly different from many other curriculums used in teaching” (p. 72). The challenge to any training agency is developing an attainable training curriculum that maximizes available resources

while meeting the expectations of its customers. Wide arrays of delivery methods exist, including the technical guidance of the NFPA. However, Forsman (2002) reminds us that “NFPA standards are national consensus documents that attempt to serve a broad range of fire services, but training to the standards must necessarily take place in the context of the needs and resources of a given community” (p. 270). As NFPA standards do not establish a specific number of training hours necessary for student competency, training program lengths may vary by several hundred hours. As Smeby (2006) points out, “because fire fighters do not become proficient without repetition, the lower number of hours for the basic firefighting courses should be suspect as not being effective” (p. 112).

In summary of the literature review, ample information exists identifying several basic firefighter-training curriculums for comparison. However, literature regarding the specific research problem was elusive at best. A competent solution is attainable utilizing the available literary information and conducting an efficient means of action research.

### Procedures

Subsequent to identifying the research problem, an action research procedure as prescribed by Isaac and Michael (1995) in the literature review was undertaken. The goal of the research was determined to be the development of a recruit-training curriculum for the MFA capable of meeting the increased customer demand. The curriculum should be adaptable to changes in demand due to increases or decreases in fire service hiring. A new program delivery that maintains the high levels of requisite firefighter knowledge and skills is essential.

A literature review was conducted to determine if other fire service training facilities were facing similar circumstances. A web search was conducted utilizing the

National Fire Academy's Learning Research Center (LRC). Several keyword searches were run including: recruit training, training demand, and teamwork. Although much written material is readily available regarding the curriculums of other training agencies, the problem of inability to meet identified demand is apparently unique to the MFA. Several books were referred to for their source material regarding training program management, problem solving, and teamwork positions. The curriculum of several recruit fire training facilities was evaluated, particularly those that utilize a module-based delivery system such as LBFD and DOD fire academies.

A comparison of the current curriculum to standards identified in NFPA 1001 was conducted. The comparison showed that the MFA has and continues to meet all guidelines set forth regarding necessary knowledge and skill abilities of a professional firefighter. As the standard does not prevent a jurisdiction from exceeding its guidelines, the MFA recruit program has continued to deliver a variety of additional material. Such material includes education in critical incident stress management, water rescue, and weapons of mass destruction.

An audit of all present training resources at the Stow campus of the MFA was conducted. This accounting gave a broad overview of each piece of the MFA arsenal including classroom spaces, outdoor training facilities, and fire apparatus (see Appendix D). In an effort identify potential training sites throughout the Commonwealth, a survey was conducted (see Appendix C). Specifically, the survey sought to establish available classroom, training ground, and burn building resources as well as projected new hires for career fire departments statewide. As a result of the data collected, 47 potential training areas were identified (see Appendix E).

Lastly, a study was undertaken to ascertain the possibility of taking what was learned through the research and applying it to a new method of delivery. A complete study of the information collected was analyzed to determine if the standards of both NFPA 1001 and the MFA would be met through a realignment of curriculum utilizing outside resources. By grouping training elements based on their dependence or non-dependence of particular resources, the study revealed such methods might prove to significantly increase the productivity of recruit training.

### Results

The first research question asked what are the demands of the MFA fire service customer. As stated in the literature review, the customer can be identified as any of the more than 130 Massachusetts fire departments that utilize the recruit-training program. The 12-week program is delivered at no cost to the communities other than salary and benefit expenses incurred over the course of the program. As most departments throughout the Commonwealth rely on mutual aid from surrounding communities, the consistency of fire ground operations benefits from recruit program participation. Over time, a majority of the state's career firefighters have graduated from MFA recruit training.

The respective communities have already hired all recruits entering the academy. It can be assumed these new recruits were selected during the hiring practice because of their potential to meet the demands of firefighting. The ideal firefighter recruit should possess the qualities of "attitude, academics, drill ground skills, and physical fitness" (Ridenhour, 2002). These qualities can be instilled through participation in the program. However, eligible prospects should demonstrate maturity, willingness to learn, and a

naturally aggressive persona in order to adequately fulfill the duties of a firefighter. The fire service customer should expect that the MFA is capable of preparing the new recruit to be mission ready upon graduation by instilling the necessary knowledge, skills, and attitude. A customer priority would be the delivery of such service in a timely fashion with a minimal wait period.

The second research question asked how other fire academies are meeting their customer service requirements. Research of several fire academy curriculums indicates a universal adherence to the guidelines of NFPA 1001. Although time frames vary from program to program, the standard serves as the template in a majority of academies. Examples of varied timeframes include the Long Beach Fire Department (LBFD) Recruit Firefighter Training Academy whose recruit program spans 14 weeks with varied class sizes (Kiesewetter, 2003). As discussed during the literature review, the LBFD academy utilizes a module or “block” delivery system similar to the DOD Fire Academy located at Goodfellow Air Force Base near San Angelo, Texas. This method of training allows specific subject areas to be grouped together in blocks or modules of miscellaneous lengths. Each student must successfully complete all academic and skill elements of each block before advancing to the next. The LBFD also incorporates emergency medical technician (EMT) training in their program during the first two weeks. The University of Illinois Fire Institute (IFSI) utilizes a six-week schedule with 24 to 27 recruits for its training program (Brauer, 2003). The Connecticut Fire Academy delivers its recruit training program to approximately 50 students per 70-day curriculum schedule (B. Deford, personal communication, October 12, 2007). The literature search and review

offered no evidence of any other fire academies dealing with demand issues similar to the MFA.

Research question three asked what the MFA is doing to meet current demands. As described in the literature review, the MFA has aggressively explored alternative methods of training delivery in order to meet demand. The program was most recently reconfigured in 2004, which allowed for a 64% increase in class size. Still in use at the present time, it has proven to overtax the MFA facility. Through this research, the author is confident of a viable and long-term solution to the identified problem. The quality of the recruit training provided by the MFA remains a priority through any curriculum changes.

The fourth research question asked what training resources are currently available to meet the identified demands. In addition to an accounting of present MFA training resources (see Appendix D), a survey was undertaken earlier this year. Specifically, the survey (see Appendix C) sought to establish available classroom, training ground, and burn building resources as well as projected new hires for career fire departments statewide. Surveys were mailed to 365 department chiefs with a 54% response rate of 197 chiefs. From the responses, 164 classroom spaces of varying seating capacities were found as well as 67 outdoor training areas and 11 burn buildings. Of these facilities, 138 were deemed available for use by the MFA. The survey also indicated estimated new hires of 443 and 425 for years 2007 and 2008 respectively. Resource parameters for use by the MFA recruit program were further determined to be a minimum classroom seating capacity of 24 students with an outdoor training area. As a result of the data collected, 47 potential training areas were identified (see Appendix E).

The final research question asked what training resources would be needed to meet the demand. Based on the comparison between the current MFA recruit curriculum and guidelines set forth in NFPA 1001, a list of requisite knowledge and skill sets was established. Approximately 26 knowledge and 15 practical skill sets were identified. An additional 27 subject areas were determined to be worthy of continued inclusion in the recruit program. These collateral subjects are listed as follows with an asterisk indicating hands-on training in addition to lecture:

Professional Standards	Profiles in Courage	Fitness/Wellness
NIMS 700 & 100	Air Cascade System*	Tactics & Strategy
Legal Aspects	Search & Rescue*	Aerial Ladders*
Pumps & Hydraulics*	Drafting*	Master Streams*
Hazardous Materials	Specialized Search*	High-rise/Sprinklers
Flashover*	Rappelling*	Elevators*
Chimney Fires	Bomb Safety	Autism
Confined Space*	Mass Transit (buses)	Water Rescue*
Common Emergencies	Weapons of Mass Destruction	
Worcester Cold Storage Warehouse Fire		

With the identification of both requisite and desired subject material determined, development of a system of five modules began. Using the DOD and LBFD templates as references, each subject, both requisite and collateral, was assigned space within a module. Particular attention was given to the first and last modules content. The intent was to avoid conducting training evolutions during these modules that required the use of any resources at the MFA campus in Stow. By doing so, a feeder-type system could be

developed whereas a new class of 24 students could be started every two weeks at any one of the 47 potential training sites identified in the survey. Past experience has shown that the facility is capable of handling 72 students. By utilizing a third site for the final module of training, the number of recruits at the Stow facility will never exceed 72 students. The proposed curriculum can theoretically be accomplished using this 10-week, five-module approach (see Appendix F). It is important to note that all lecture content, practical skill evolutions, and evaluation standards remain as they are. At a fully operational level (after 10 weeks), the recruit program would be capable of graduating more than 600 students per year.

### Discussion

Of vital importance during the research was the preservation of the programs commitment to training beyond just basic firefighter skills. Instilling a sense of discipline, morale, teamwork, and desire into the heart of each recruit has and will remain a priority through any program change. A supportive training system can stimulate confidence and motivation within a recruit class. As Carter and Rausch (1989) state, “people learn best when they are highly motivated...” (p. 340). Few occupations place a higher value on the concept of teamwork than the fire service. Montana and Mitchell (2005) find that “a winning team is dependent on the people who work in that environment” (p. 7). Everything a firefighter accomplishes in the course of his/her work is the result of a team effort, from recruit training to retirement. A simple definition of a team, though not describing firefighters, comes from Katzenbach and Smith (1993), who state, “a team is small number of people with complementary skills who are committed to a common

purpose, performance goals, and approach for which they hold themselves mutually accountable” (p. 45).

Responsibility for the development of such positive attributes during training falls to the instructors. Ridenhour (2002) has stated, “the instructors’ primary roles are to coach, to mentor, and to teach to the best of their abilities” (p. 108). Ridenhour (2002) also found that “the training staff should have a strong mix of personalities and competencies. Most critical is that there be consistency among instructors-consistency in how skills are taught on the drill ground, consistency in discipline procedures, and consistency in attitude” (p. 107).

The success of any worthwhile training program can be measured by its commitment to quality curriculum delivery and instructor skills development. Forsman (2002) states that “in terms of instructor’s skills development and the facilities, planning for the use of the best (i.e., most appropriate) instructional methodology will ultimately make the training program more effective and more economical” (p. 272). The MFA will strive to meet this commitment through whatever changes are necessary to meet the demands of the fire service customer.

### Recommendations

As a result of the research, a viable solution to the identified problem has been developed. Utilizing the knowledge gained through the experiences of others has allowed for the possibility of long-term solution to a priority issue at the MFA. The MFA has a unique opportunity to more effectively meet the growing Massachusetts fire service demand for its recruit fire fighter training program. Adoption of the proposed delivery method would allow the MFA to provide a quality program to its customers that meets all

national certification guidelines set forth in NFPA 1000: *Standard for Fire Fighter Professional Qualifications*. Students would also continue to receive training and opportunity for certification to NFPA 472: *Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents*. The utilization of alternate training areas provides an opportunity to present recruit training at maximum levels of efficiency. The flexibility of the program would easily allow for adjustments in scheduling depending upon a rise or fall in customer demand. The MFA would also have the ability to offer larger departments recruit level training by slightly modifying the program to include subject matter specific to that department (e.g., Worcester, Boston).

The MFTC serves as the statutory authority for approval of all curriculum and courses offered at the MFA. The presented research and its results provide an occasion to make positive improvement in the way the MFA meets the demands of its fire service customers. It is the author's recommendation that the product of this research be presented to the members of the MFTC for their review and consideration.

## References

- Brauer, B.R. (2003, March). Recruit academy training from the ground up. *Fire Engineering*, 156, 83-96.
- Buckman, J.M., III (2005, March). Establishing the training curriculum. *Fire Engineering*, 158, 71-72+.
- Carter, H.R., & Rausch, E. (1989). *Management in the fire service* (2<sup>nd</sup> ed.). Quincy, MA: National Fire Protection Association.
- Executive Office of Public Safety & Security (EOPS), Massachusetts Department of Fire Services. (n.d.). *Massachusetts fire training council*. Retrieved May 20, 2007, from [http://www.mass.gov/?pageID=eopsterminal&&L=6&L0=Home&L1=Public+Safety+Agencies&L2=Massachusetts+Department+of+Fire+Services&L3=Department+of+Fire+Services&L4=Office+of+the+State+Fire+Marshal&L5=Boards+and+Commissions&sid=Eeops&b=terminalcontent&f=dfs\\_mfa\\_council&csid=Eeops](http://www.mass.gov/?pageID=eopsterminal&&L=6&L0=Home&L1=Public+Safety+Agencies&L2=Massachusetts+Department+of+Fire+Services&L3=Department+of+Fire+Services&L4=Office+of+the+State+Fire+Marshal&L5=Boards+and+Commissions&sid=Eeops&b=terminalcontent&f=dfs_mfa_council&csid=Eeops)
- Forsman, D.P. (2002). Training for fire and emergency response services. In D. Compton & J. Granito (Eds.), *Managing fire and rescue services* (pp. 267-289). Washington, DC: International City/County Management Association.
- Isaac, S., & Michael, W.B. (1995). *Handbook in research and evaluation* (3<sup>rd</sup> ed.). San Diego, CA: Educational and Industrial Testing Services.
- Heifetz, R.A., & Linsky, M. (2002). *Leadership on the line: staying alive through the dangers of leading*. Boston, MA: Harvard Business School Press.
- Katzenbach, J.R., & Smith, D.K. (1993). *The wisdom of teams: creating the high performance organization*. Boston, MA: Harvard Business School Press.

- Kiesewetter, T.J. (2003). *The redesign of the Long Beach Fire Department's recruit firefighter training academy*. Unpublished master's thesis, California State University, Long Beach.
- Long Beach (CA) Fire Department. (2007). *Recruit fire training schedule framework*. Retrieved October 9, 2007, from <http://lbfdtraining.com/Information/academy/academyschedule.html>
- Montana, J., & Mitchell, T. (2005). *The winning spirit: 16 timeless principles that drive performance excellence*. New York, NY: Random House
- National Fire Protection Association. (2007). *Standard for fire fighter professional qualifications* (NFPA 1001). Retrieved October 8, 2007, from [http://www.nfpa.org/freecodes/free\\_access\\_document.asp](http://www.nfpa.org/freecodes/free_access_document.asp)
- Ridenhour, K.T. (2002, March). Recruit academy: a guide to procedures. *Fire Engineering*, 155, 107-120.
- Smeby, L.C., Jr. (2006). *Fire and emergency services administration: management and leadership practices*. Boston, MA: Jones and Bartlett.
- U.S. Census Bureau, American Fact Finder. (2006). *Annual estimates of the population for incorporated places in Massachusetts, 2006* [Data file]. Available from U.S. Census Bureau Web site, <http://www.census.gov>
- U.S. Department of Defense – Plan of instruction: 2001 – Fire protection apprentice. Goodfellow Air Force Base, TX.
- Varone, J.C. (2007). *Legal considerations for fire and emergency services*. Clifton Park, NY: Thomson Delmar Learning.

## Appendix A

Chap. 842. AN ACT ESTABLISHING A MASSACHUSETTS FIRE TRAINING COUNCIL, A BUREAU OF FIRE TRAINING IN THE DIVISION OF OCCUPATIONAL EDUCATION AND A MASSACHUSETTS FIREFIGHTING ACADEMY.

*Whereas*, The deferred operation of this act would tend to defeat its purpose, which is, in part, to provide forthwith for the establishment of certain fire training facilities by the commonwealth for the purpose of the planning and operation of necessary fire training programs throughout the commonwealth, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public health, safety and convenience.

*Be it enacted, etc., as follows:*

SECTION 1. Chapter 6 of the General Laws is hereby amended by inserting after section 163, added by chapter 579 of the acts of 1971, under the caption MASSACHUSETTS FIRE TRAINING COUNCIL, the following two sections:—

*Section 164-* There shall be a Massachusetts fire training council, hereinafter called the council, to consist of seven members to be appointed by the governor, three of whom shall be fire chiefs selected from a list of nine names submitted by the Fire Chiefs Association of Massachusetts and of whom one shall represent a fully paid fire department, one a partially paid part-call fire department and one a fullcall fire department, one of whom shall be selected from a list of three names submitted by the Massachusetts Institute of Fire Department Instructors, who is a fire department training instructor holding an officer's rank, but is not a fire chief, one of whom shall be a firefighter selected from a list of three names submitted by the Associate Firefighters Union of Massachusetts who is not a fire officer and two of whom shall be citizens of the commonwealth. The associate commissioner of occupational education in the department of education and the chief of fire training shall be *ex officio* members of the council. Members shall be appointed for terms of three years, except that the terms of the first appointments shall be three members for one year, two members for two years and two members for three years. Subsequent appointments shall be made in the same manner, 738 ACTS, 1971. —CHAP. 842.

except that only three names shall be submitted by the Fire Chiefs Association of Massachusetts. No person shall be appointed to serve more than two full terms and prior service on said council for a term of less than two years resulting from an initial appointment or an appointment for the remainder of an unexpired term shall not constitute a full term. Members shall hold office until a successor is appointed and no appointive member shall serve beyond the time he

ceases to hold office or employment by reason of which he was eligible for appointment to the council.

The members of the council shall serve without compensation, but shall be reimbursed for their actual and necessary expenses incurred in the performance of their duties.

The council shall meet regularly each month, except that the chairman, with council approval, may omit meetings in July and August and the chairman or the governor may call additional meetings at other times, of which all members shall be given in writing at least five days notice. If any member is absent from three regularly scheduled meetings, exclusive of July and August, in any calendar year, his office as a member shall be deemed vacant. The chairman of the council shall make an annual report to the governor and the board of education and include in such report its recommendations for appropriate legislation.

*Section 165.* The council shall consult with and advise the bureau of fire training in the division of occupational education relative to the following matters:—

- (1) The establishment of a minimum firefighting training standard for recruit firefighters and a minimum uniform training curriculum for all other levels of fire service personnel.
- (2) The establishment of minimum requirements for instructors employed in the bureau of fire training.
- (3) The location of the Massachusetts Firefighting Academy and area training centers.
- (4) The establishment of standards and procedures for approving facilities of employing agencies desirous of conducting training under the bureau.

The council may provide such necessary services to local fire training centers meeting the established standards as are beyond their capacity to provide.

The council shall consult and cooperate with any employing agency, the division of civil service, state university, college, community college, regional vocational school or other educational institution concerning the development of firefighter training standards and facilities.

The council shall annually review all standards, courses and curriculum offered by the bureau.

**SECTION 2.** The sixth paragraph of section IF of chapter 15 of the General Laws, as appearing in section 1 of chapter 837 of the acts of 1969, is hereby amended by adding after clause (7) the following clause:—

- (8) To establish a bureau of fire training which shall operate a training school for firefighters to be known as the Massachusetts Firefighting Academy, and which shall be the sole agency of the comACTS, 1971. —CHAP. 843. 739

monwealth responsible for the training of firefighters. Said bureau shall be directed by a chief of fire training who shall be appointed by the board of education. Said bureau, with approval of the Massachusetts fire training council, may accept for any of its purposes and functions any donations of property and grants of money from any governmental unit, public agency, institution, person, firm or corporation. Said grants shall be kept in a separate fund by the state treasurer and shall be disbursed by the state treasurer at the direction of said council.

SECTION 3. The provisions of this act shall not apply to any city or town which has established fire training facilities and is employing full-time fire training personnel prior to its effective date.

*Approved October 7, 1971.*

## Appendix B

### CHAPTER 175. INSURANCE

Chapter 175: Section 195. Fire insurance companies required to contribute to costs of training fire fighting personnel

Section 195. Sums for the estimated expenses of the operation of training facilities and curriculum for fire fighting personnel of the Massachusetts Fire Fighting Academy, not to exceed seven hundred and fifty thousand dollars per year, as may be appropriated therefore, and in addition the estimated cost of fringe benefits and indirect costs associated with such operation and curriculum, shall be paid to the commonwealth by insurance companies writing fire, homeowners multiple peril or commercial multiple peril policies on property situated in the commonwealth within thirty days after notice from the commissioner of such estimated expenses. The commissioner shall apportion such estimated charges among all such companies and shall assess them for the same on a fair and reasonable basis, not to exceed one-fourth of one per cent of their estimated gross premiums on such insurance written on property situated in the commonwealth. The commissioner shall subsequently apportion actual costs among all such companies and shall make assessment adjustments for the same for any variation between estimated and actual costs on a fair and reasonable basis, not to exceed one-fourth of one per cent of their actual gross premium on such insurance written on property situated in the commonwealth. Such estimated and actual costs shall include an amount equal to the cost of fringe benefits as established by the commissioner of administration pursuant to section six B of chapter twenty-nine.

Appendix C

25 January 2007

Dear Chief,

In order to effectively forecast and plan for future fire service training needs within the Commonwealth, we are asking for your assistance. The Academy is currently exploring several different options for improving delivery of recruit firefighter training. Your help is needed to aid us in identifying potential training resources available throughout the state. Please take a moment to answer the following questionnaire and return via electronic facsimile to the attention of "Recruit Coordinator" at (978) 567-3229.

- 1) Department\_\_\_\_\_
- 2) Does your department have a training classroom?  
\_\_\_\_YES\_\_\_\_NO  
If yes, what is the seating capacity? \_\_\_\_\_
- 3) Does your department have an outdoor training area or drill yard?  
\_\_\_\_YES\_\_\_\_NO
- 4) Does your department have a burn building? \_\_\_\_YES\_\_\_\_NO
- 5) If applicable, would use of your training facilities by MFA be possible periodically if under written agreement or contract?  
\_\_\_\_YES\_\_\_\_NO
- 6) How many new full-time staff do you anticipate for your department during 2007? \_\_\_\_\_
- 7) How many new full-time staff do you anticipate for your department during 2008? \_\_\_\_\_

Thank you for your cooperation,

Bruce D. Gauvin  
Recruit Program Coordinator  
Massachusetts Firefighting Academy

## Appendix D

### MASSACHUSETTS FIREFIGHTING ACADEMY

#### Facility Features

Main Administration and Classroom Building - Three classrooms, a 110 seat lecture hall, media library a multi-function fire station and a hose tower, administrative offices, vehicle maintenance and print shop.

Training Resource Center - Books, magazines, codes, standards, videos and multimedia training aids.

Burn Building - Live fire building with four stories, 17 rooms and two interior stairwells. The walls and ceilings of the building are protected by heat resistant tiles to a temperature of 2,400 degrees F.

Training Tower - Six stories with artificial smoke, sprinkler and standpipe system, a stairwell pressure / purge ventilation system, rappel bollards and a fire escape. Each room in the tower is configured to be slightly different from the others to provide a variety of training challenges.

Sprinkler Lab - Three complete working riser systems, a fire department connection and a sprinkler head demonstration enclosure.

Apparatus - Six triple combination pumping engines, one "Quint" aerial ladder and one aerial ladder.

Confined Space Training Prop - Realistic cable vault, manhole, window and safety access door.

Gas School - Two types of flammable gas, 16 different training props, command and safety tower 2,200 gallons per minute high pressure water supply and water recycling system.

Drill Yard - More than 200,000 square feet of paved training area.

Water Recovery and Treatment System - Capable of capturing, treating and recycling up to 75 percent of the water used for training

Drafting Pit – 19,000 gallons water, dry hydrant, surface hatch, stream collector and fixed deck gun.

Cafeteria - Dining facility with 60 seats serving meals for students and staff.

Appendix E

Results of training resources survey/questionnaire:

- 1) Received **197** responses from **365** inquiries of fire departments statewide. (54%)
- 2) Training classrooms available: **164**  
  
    Seating capacities: 1 to 20 students – **32**  
                            21 to 30 students – **55**  
                            31 to 40 students – **37**  
                            41 to 50 students – **29**  
                            50+ students – **11**
- 3) Outdoor training areas: **67**
- 4) Burn buildings: **11**
- 5) Facilities available for use by Massachusetts Firefighting Academy: **138**
- 6) New hires anticipated for 2007: **443**
- 7) New hires anticipated for 2008: **425**

Potential training areas as defined below: **47**

Minimum requirements for revised recruit training plan:

- Seating for 24 students
- Drill yard or outdoor training area
- Availability on a rotating schedule

## Appendix F

**MODULE 1****Training Day 1**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Orientation	Lecture	0700-0900	
FD Organization History & Tradition	Lecture	0900-1130	
Lunch		1130-1200	
Accountability	Lecture	1200-1330	Issue accountability tags
Safety	Lecture	1345-1515	Station, Fireground & Apparatus
Clean up		1515-1530	
Dismissal		1530	

**Training Day 2**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Professional Standards	Lecture	0715-0915	
Certification	Lecture	0925-1000	
Profiles in Courage	Lecture	1010-1100	Stackpole, Shaler, Bresnan
Lunch		1115-1200	
Fitness/Wellness	Lecture	1200-1400	
Training Station	Hands- on	1440-1515	PPE Inspection & Proper Donning
Clean up		1515-1530	
Dismissal		1530	

**Training Day 3**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
NIMS	Lecture	0900-1530	
Lunch		At instructors discretion	
Dismissal		1530	

**Training Day 4**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
NIMS	Lecture	0900-1530	
Lunch		At instructors discretion	
Dismissal		1530	

**Training Day 5**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
NIMS	Exam	0900-1000	
Building Construction	Lecture	1000-1230	
Lunch		1230-1300	
Electricity	Lecture	1300-1445	
Clean up		1445-1500	
Dismissal		1500	

**Training Day 6**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Forcible Entry	Lecture	0900-1030	
Ropes & Knots	Lecture	1030-1200	
Lunch		1200-1230	
Training stations	Hands-on	1230-1510	1-Tying station 2-Ropes 3-Confidence course 4-Forcible entry props 5-Tying axe & hook
Clean up		1510-1530	
Dismissal		1530	

**Training Day 7**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
SCBA	Lecture	0900-1245	
Lunch		1245-1330	
Training Station	Hands-on	1330-1510	SCBA donning Overhead & Coat methods
Clean up		1510-1530	
Dismissal		1530	

**Training Day 8**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Communications	Lecture	0900-1100	
Air Cascade	Lecture	1115-1200	
Lunch		1200-1230	
Training Stations	Hands-on	1240-1510	1-SCBA-1 (OH) 2-SCBAWI-1 3-SCBA-2 ©

			4-Review knots/tying halligan & ladder
Clean up		1510-1530	
Dismissal		1530	

**Training Day 9**

<u>SUBJECT</u>	<u>TYPE</u>	<u>TIME</u>	<u>NOTES</u>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Tactics & Strategy	Lecture	0900-1100	
Training Stations	Hands-on	1100-1510	1-Review SCBA 1&2 2-Review SCBAWI & troubleshooting 3-SCBA emergency procedures 4-Ropes & knots on charged/uncharged hoselines
Lunch		At instructors discretion	
Clean up		1510-1530	
Dismissal		1530	

**Training Day 10**

<u>SUBJECT</u>	<u>TYPE</u>	<u>TIME</u>	<u>NOTES</u>
Roll Call		0700	
Module Test #1	Exam	0715-0815	
Legal Aspects	Lecture	0830-1130	
Lunch		1130-1200	
SCBA Donning	Evaluation	1200-1445	SCBA 1&2
Basic Knots	Evaluation	1200-1445	Pass/Fail
Clean up		1510-1530	
Dismissal		1530	

**MODULE 2****Training Day 11**

<u>SUBJECT</u>	<u>TYPE</u>	<u>TIME</u>	<u>NOTES</u>
Roll Call		0700	
Classroom/Locker Assignments		0715-0800	
Ground Ladders	Lecture	0815-0945	
Hose & Appliances	Lecture	0950-1130	
Lunch		1130-1200	
Training Stations	Hands-on	1200-1510	1-One/two person ladder carries 2-Hose loads
Clean up		1510-1530	
Dismissal		1530	

**Training Day 12**

<u>SUBJECT</u>	<u>TYPE</u>	<u>TIME</u>	<u>NOTES</u>
Roll Call		0700	

Physical Training		0715-0815	
Clean up		0815-0845	
Search & Rescue	Lecture	0845-1045	
Training Stations	Hands-on	1045-1515	1-Search & Rescue (SR-1) 2-Ladder raises (LD16 & LD24-2) 3-Ladder climbing w/tools
Lunch		1205-1235	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 13**

<u>SUBJECT</u>	<u>TYPE</u>	<u>TIME</u>	<u>NOTES</u>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Ventilation	Lecture	0845-1015	
Training Stations	Hands-on	1030-1510	1-Search & Rescue (SR-2) 2-Review ladder raises (teach 28') 3-Long lug out
Lunch		1140-1215	
Clean up		1510-1530	
Dismissal		1530	

**Training Day 14**

<u>SUBJECT</u>	<u>TYPE</u>	<u>TIME</u>	<u>NOTES</u>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Salvage & Overhaul	Lecture	0845-1015	
Training Stations	Hands-on	1030-1510	1-Salvage covers 2-Review ladder raises (teach 35') 3-PPV & Negative vent demo 4-Hose over ladders
Lunch		1130-1210	
Clean up		1510-1530	
Dismissal		1530	

**Training Day 15**

<u>SUBJECT</u>	<u>TYPE</u>	<u>TIME</u>	<u>NOTES</u>
Roll Call		0700	
Module Test #2	Exam	0715-0745	
Training Stations	Hands-on	0800-1445	1-Ladder beam raise & pivots (28/35) 2-Roof operations (RL-1) 3-Ladder raise evaluations (24/28/35) 4-Search & Rescue (webbing drag)
Lunch		1230-1300	
Clean up		1445-1500	
Dismissal		1500	

**Training Day 16**

<u>SUBJECT</u>	<u>TYPE</u>	<u>TIME</u>	<u>NOTES</u>
Roll Call		0700	

Physical Training		0715-0815	
Clean up		0815-0845	
Aerial Ladders	Lecture	0845-1045	
Training Stations	Hands-on	1100-1510	1-Ladder raise (50') 2-Aerial ladder operations 3-Frozen/obstructed ladder raises 4-Ladder climbing
Lunch		1210-1250	
Clean up		1510-1530	
Dismissal		1530	

**Training Day 17**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Training Stations	Hands-on	0900-1510	1-Review all knots/hauling drill 2-Review all ladder raises 3-Ladder raise & pivots (50') 4-Down FF carries & drags
Lunch		1215-1300	
Clean up		1510-1530	
Dismissal		1530	

**Training Day 18**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Training Stations	Hands-on	0900-1510	1-Draeger maze (fixed) 2-Search & Rescue (SR-4) 3-Ladder Co. drill w/climb 4-Combined evolutions 5-Aerial ladder rescue
Lunch		1115-1200	
Clean up		1510-1530	
Dismissal		1530	

**Training Day 19**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Water Supply	Lecture	0845-1030	
Training Stations	Hands-on	1045-1510	1-Search & Rescue (SR-5) 2-Review all ladder pivots 3-Review webbing & blanket drags
Lunch		1130-1200	
Clean up		1510-1530	
Dismissal		1530	

**Training Day 20**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Module Test #3	Exam	0715-0745	
Fire Streams	Lecture	0800-0930	
Training Stations	Hands-on	0945-1445	1-Practice SCBA donning 2-SCBA evaluation 3-Draeger maze (fixed) 4-Aerial ladder climb
Lunch		1145-1230	
Clean up		1445-1500	
Dismissal		1500	

**MODULE 3****Training Day 21**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Pumps & Hydraulics	Lecture	0845-1515	Hands-on pump panel orientation
Lunch		At instructors discretion	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 22**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Training Stations	Hands-on	0900-1515	1-Pumps and hydraulics 2-Hose handling in drillyard 3-Chicago loop/Lazy S
Lunch		At instructors discretion	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 23**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Training Stations	Hands-on	0900-1510	1-Hose handling (1-3/4" & 2-1/2") 2-LDH & automatic nozzles 3-Search for missing FF
Lunch		1200-1230	
Clean up		1510-1530	
Dismissal		1530	

**Training Day 24**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Training Stations	Hands-on	0900-1510	1-Teach Hose 1 evolution 2-Grade Hose 1/Pump operator 3-Search for missing FF (part 2) 4-Review tying & hauling
Lunch		1130-1215	
Clean up		1510-1530	
Dismissal		1530	

**Training Day 25**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Module Test #4	Exam	0715-0800	
Drafting	Lecture	0815-0915	
Master Streams	Lecture	0930-1100	
Lunch		1100-1145	
Training Stations	Hands-on	1200-1445	1-Master streams/Ladder pipes 2-Grade Hose 1
Clean up		1445-1500	
Dismissal		1500	

**Training Day 26**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Specialized Search	Lecture	0845-1000	
Training Stations	Hands-on	1015-1515	1-Double pump/HAV operations 2-Specialized search
Lunch		1215-1300	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 27**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Hazmat	Lecture	0715-1515	
Training Station	Hands-on	1100-1200	Ladder climbing drill
Lunch		1200-1230	
Clean up		1515-1530	
Dismissal		1500	

**Training Day 28**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Hazmat	Lecture	0845-1515	
Class Pictures		1100-1200	
Lunch		1200-1230	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 29**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
High-Rise/Sprinklers	Lecture	0900-1200	
Lunch		1200-1230	
Training Stations	Hands-on	1230-1515	1-Hazmat decon 2-RAM decon 3-Hospital tent set-up
Clean up		1515-1530	
Dismissal		1530	

**Training Day 30**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Hazmat FRO Test	Exam	0715-0815	
Fire Extinguishers	Lecture	0830-1030	
Training Stations	Hands-on	1045-1445	1-Fire extinguisher practical 2-Draeger maze (trailer) 3-Relay pumping
Lunch		1200-1230	
Clean up		1445-1500	
Dismissal		1500	

**MODULE 4****Training Day 31**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Module Test #5	Exam	0845-0915	
Nature of Fire	Lecture	0930-1515	1-Nature of fire demo (burn bldg.) 2-Power venting demo
Lunch		1200-1230	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 32**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Foam/Flammable Liquids	Lecture	0900-1130	Foam demo
Lunch		1130-1200	
Training Stations	Hands-on	1230-1515	1-Indirect fire attack 2-Ground ladder review w/climbing 3-Teach Hose 2 evolution
Clean up		1515-1530	
Dismissal		1530	

**Training Day 33**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Automobile Fires	Lecture	0900-1045	
Training Stations	Hands-on	1100-1515	1-Grade Hose 2 evolution 2-Car/Dumpster fires 3-Aerial ladder ops w/ladder pipe
Lunch		1200-1240	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 34**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Vehicle Extrication	Lecture	0900-1045	
Training Stations	Hands-on	1100-1515	1-Grade Hose 2/3 2-Vehicle extrication
Lunch		1245-1315	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 35**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Module Test #6	Exam	0715-0800	
Training Station	Hands-on	0815-1445	Phase 1 fires in burn building
Lunch		1200-1230	
Clean up		1445-1500	
Dismissal		1500	

**Training Day 36**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Flashover	Lecture	0900-1015	
Training Stations	Hands-on	1030-1515	1-Flashover practical 2-Rescue over ladders (c-side tower) 3-Ladder climbing drill
Lunch		1200-1245	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 37**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0730	Stretching only
Training Station	Hands-on	0730-1515	Phase 2 fires in burn building
Lunch		1200-1245	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 38**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Flammable Gas	Lecture	0900-1515	
Lunch		1200-1230	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 39**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Rappelling	Lecture	0900-1000	
Training Stations	Hands-on	1015-1515	Rappelling
Lunch		1200-1230	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 40**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Module Test #7	Exam	0715-0800	
Training Station	Hands-on	0815-1445	Phase 3 fires in burn building
Lunch		1200-1245	
Clean up		1445-1500	

Dismissal		1500	
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**MODULE 5****Training Day 41**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Training Station	Hands-on	0900-1515	Live fire/flammable gas
Lunch		1200-1245	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 42**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Elevator Emergencies	Lecture	0900-1100	
Chimney Fires	Lecture	1100-1200	
Lunch		1200-1230	
Bomb Safety	Lecture	1230-1515	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 43**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
Arson	Lecture	0900-1200	
Lunch		1200-1230	
Autism	Lecture	1230-1515	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 44**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	Offsite/MA State Police trg. tank
Water Rescue	Lecture	0900-1130	
Lunch		1130-1200	
Training Station	Hands-on	1200-1515	Water rescue
Clean up		1515-1530	
Dismissal		1530	

**Training Day 45**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Physical Training		0715-0815	
Clean up		0815-0845	
MBTA	Lecture	0900-1230	Bus demo
Lunch		1230-1300	

Wildland Fires	Lecture	1300-1445	May be substituted w/Lifeflight
Clean up		1445-1500	
Dismissal		1500	

**Training Day 46**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Final Exam	Exam	0715-1015	Certification written exam
Common Emergencies	Lecture	1015-1215	
Lunch		1215-1245	
Training Stations	Hands-on	1300-1430	1-SCBA review 2-Rope review
Clean up		1430-1445	
Student Evaluations		1445-1530	
Dismissal		1530	

**Training Day 47**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Confined Space	Lecture	0715-0915	
Training Station	Hands-on	0930-1515	Confined space
Clean up		1515-1530	
Dismissal		1530	

**Training Day 48**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Certification	Exam	0715-1230	Non-fire practical skills/6 stations
Lunch		1230-1300	
Equipment Return		1300-1330	
Worcester Cold Storage Fire	Lecture	1330-1515	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 49**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
Weapons of Mass Destruction	Lecture	0715-1515	
Lunch		1200-1230	
Clean up		1515-1530	
Dismissal		1530	

**Training Day 50**

<b><u>SUBJECT</u></b>	<b><u>TYPE</u></b>	<b><u>TIME</u></b>	<b><u>NOTES</u></b>
Roll Call		0700	
History & Tradition of the Fire Service	Lecture	0715-1145	
Lunch/ Open House		1145-1300	
<b>GRADUATION</b>		<b>1300</b>	